jammer power at RF. This detected power is fed through a loop filter and is used to adjust the receive AGC, thereby adjusting the intercept point of the receive components. The gain is decreased as the measured power increases and the gain is increased as the measured power decreases. The power of the transmit AGC, located in the signal path before the power amplifier, is adjusted in the same way as the receive AGC in order to maintain the overall transmit power level (col. 5, lines 6-30).

As admitted in the Action, Peterzell fails to show a processor for computing an error rate. In addition, Peterzell fails to teach or suggest, adjusting the input intercept point depending on the computed error rate. The Action relies on Wing for the claimed features missing from Peterzell.

Assuming, for the sake of argument, that the proposed combination could have been made, it would not result in the claimed subject matter. Peterzell discloses a technique for increasing receiver immunity to interference. According to the Abstract of Peterzell, a power level of a received signal is detected, and, based on the power level, a low noise amplifier is connected or by-passed, thus increasing the intercept point of the receiver components. Peterzell does not disclose or suggest a <u>low noise amplifier with an adjustable input intercept point</u>. At best, the receiver components of Peterzell have an input intercept point that is adjustable by connecting and disconnecting a low noise amplifier.

Moreover, in Peterzell, the input intercept point is adjusted based on the power level of the received signal, not <u>based on a computed error rate</u> as recited in claim 1. As discussed below, Wing fails to cure these deficiencies .

The Action asserts that Wing teaches a processor for computing an error rate and concludes that it would have been obvious to one of ordinary skill in the art to modify Peterzell to adjust the input intercept point depending on the computed error rate. The Action has not shown <u>why</u> it would have been obvious to one skilled in the art to modify Peterzell in the manner suggested. The statement "to enhance processor's functionality" at best explains a possible result of a combination but does not explain <u>why</u> one skilled in the art would have been motivated to make the proposed combination. Claim 1 is directed to improving the dynamic range of a receiver. The processor in Wing computes an error rate for an entirely unrelated purpose.

Wing is directed to the testing of the operation of a radio in a base station of a wireless communication network without removing the radio from service and without utilizing a separate test radio. Data concerning call processing activities are collected during wireless communications. A failure condition on an overhead or traffic channel of a radio is identified by suitably accessing the collected data, processing the data, and then comparing the results to expected values (Abstract). The passage relied on by the Action teaches that when a frame error rate is detected to be above a user defined threshold for a predetermined number of times, a fault is declared on the channel. An indication is sent to the MSC that maintenance is required on the radio (col. 8, line 22 to col. 9, line 45). There is no hint or suggestion regarding adjusting an intercept point or even improving the dynamic range of a receiver <u>according to the computed error rate</u>. Further, there is no teaching or suggestion in Wing regarding affecting the operation of a receiver directly in any way in response to the frame error rate. Wing merely notifies an operator at the MSC that maintenance should be performed.

The Action fails to appreciate the novelty in improving the dynamic range of a receiver by (1) utilizing a computed error rate value <u>to</u> (2) adjust the input intercept point as defined by claim 1. These two critical features, at least, must be combined when considering the patentability of claim 1. While there may be other methods and apparatuses utilizing these features independently, the prior art fails to teach the advantages of their combination.

For example, the conventional approach to adjusting the dynamic range of a receiver adjusts the intercept point based on a transmit power only. As discussed on page 4, lines 3-18 of the Application, while the conventional approach is effective for many situations, it does not provide adequate dynamic range of the receiver in at least one situation, e.g., when the subscriber unit is operating relatively close to a base station and a narrowband signal appears. In this situation, the subscriber unit transmitter is operating at reduced power, and the LNA's third order input intercept point, which is adjusted depending on the transmit power level, is set at the minimum level. If a strong AMPS signal or other narrowband signal, originating from an AMPS base station co-located with the CDMA base station, an AMPS microcell within the larger CDMA cell, or another source, appears within the +/- 1.85 MHZ region around the subscriber unit's receive channel, the strong narrowband interfering signal mixes with the subscriber unit transmit signal and generates on-channel crossmodulation products. This causes a reduction in receive signal-to-noise ratio and possibly a loss of communications.

Linking the control of the LNA's third order input intercept point to the transmit power level is thus, not alone, sufficient to achieve the optimum dynamic range to deal with narrowband interfering signals that are likely to be encountered in actual system operation.

Thus, the Action has failed to establish a *prima facie* case of obviousness. Applicant respectfully submits that one skilled in the art would not have been motivated to modify Peterzell with the teaching of Wing in order to adjust the input intercept point depending on the computed error rate, because the processor in Wing computes the error rate for an entirely unrelated reason. More particularly, Wing is directed to a method and apparatus for identifying a failure condition.
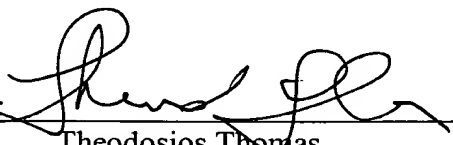
Claims 8 and 15 recite similar features as claim 1 and are considered allowable for at least reasons analogous with those set forth above with respect to claim 1. Claims 2-7, 9-14, and 16-21 depend from claims 1, 8, and 15, respectively, and are considered allowable for at least the same reasons.

CONCLUSION

It is now believed that all pending claims are in condition for allowance and such is earnestly requested. Accordingly, Applicant respectfully requests notice thereof at an early date. The Examiner is encouraged to telephone the undersigned at the below-listed number if, in the Examiner's opinion, such a call would aid in the examination of this application.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By: _____
Theodosios Thomas
Registration No. 45,159

P.O. Box 1404
Alexandria, Virginia 22313-1404
(919) 941-9240

Date: February 6, 2001